# Measuring Economic Performance <br> Additional Homework Problems <br> ECON 3133 <br> Dr. Keen 

## Answers

1. 

a. $\quad \mathrm{GDP}=\mathrm{C}+\mathrm{I}+\mathrm{G}+\mathrm{X}-\mathrm{IM}$

$$
=4,378.2+882.0+1148.4+659.1-724.3
$$

= \$6,343.4 billion.
b. NNP = GDP + net factor income from abroad - depreciation

$$
\begin{aligned}
& =6,343.4+5.7-669.1 \\
& =\$ 5,680.1 \text { billion. }
\end{aligned}
$$

c. First, calculate NI via the expenditure method:

NI = NNP

- statistical discrepancy
+ net subsidies to government businesses
- business transfers
- sales and excise taxes
$=5,680.1-2.7+9.0-28.7-525.3$
$=\$ 5,132.4$ billion.
Next, calculate NI through adding up the incomes of different people:
$\mathrm{NI}=$ compensation of employees + proprietors' income + corporate profits + net interest
+ rental income
$=3,780.4+442.6+485.8+399.5+24.1$
$=\$ 5,132.4$ billion.

2. 

a. Budget deficit = private saving + rest of the world saving - investment

$$
\begin{aligned}
& =1,050+100-1,100 \\
& =\$ 50 \text { billion }
\end{aligned}
$$

b. Inventory investment (13) = Inventory stock (13) - Inventory stock (12)

$$
\begin{aligned}
& =1,050-1,000 \\
& =\$ 50 \text { billion. }
\end{aligned}
$$

c. $\mathrm{GDP}=\mathrm{GNP}-$ net factor payments from abroad
$=7,000-80$
$=\$ 6,920$ billion.
3. Example: CPI Inflation for 1979: $\left.\left(\mathrm{P}_{79} / \mathrm{P}_{78}-1\right) \times 100=(72.6 / 65.2-1)\right) \times 100=11.3 \%$.

| Year | CPI | GDP Def. |
| :---: | :---: | :---: |
| 1979 | $11.3 \%$ | $8.6 \%$ |
| 1980 | 13.5 | 9.5 |
| 1981 | 10.3 | 10.0 |
| 1982 | 6.2 | 6.2 |

